Catching invasive Egyptian geese (Alopochen aegyptiacus): evaluation of the optimal deployment season for a floating Larsen trap

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Management of invasive geese is generally done by egg pricking or oiling, shooting and/or trapping. Trapping efforts generally focus on moulting flightless geese, which has proven to be highly effective for capturing large numbers. In Flanders, moult trapping has been very successful for Canada geese, with a total of 7829 caught between 2010 and 2013. Egyptian geese also experience a full primary moult leaving them flightless, but are, due to their excellent diving capacities, not susceptible to the current moult trapping systems. In addition, the species does not generally nest in colonies and regularly uses nest sites in trees, making the nest less accessible for reproduction control. This seriously reduces the amount of eggs that can be found for oiling or pricking, leaving shooting as the only feasible management option to date. However, since numbers of this alien species have been increasing and are continuing to rise, there is a growing demand for effective control measures in addition to shooting. Egyptian geese are known to be highly territorial which opens opportunities for the use of traps with live decoy birds, the so-called Larsen traps. In order to determine the optimal catching month with these traps, we set out a field experiment in which 19 floating Larsen traps were used for one week in each month during one year. Given the large differences in the species behaviour throughout the year we expected to see significant differences in catchment success over the different months. Success was defined as either the number of geese that could be caught per day or the number of days it took to catch the first goose at a given location in a given month. The results showed clear differences between the different months, designating spring months as the optimal season to deploy decoy birds. In addition, elements that further contribute to the observed trapping success are explored, non-target effects (bycatch) and possible improvements and alternative deployment options are identified. This field trial was performed within the framework of the EU co-funded Interreg 2Seas project RINSE (Reducing the Impact of Non-Native Species in Europe) (www.rinse-europe.eu) (2012-2014), which seeks to improve awareness of the threats posed by INNS, and the methods to address them.